Mr. Tom Kimball State Water Resources Control Board Water Quality Division P.O. Box 100 Sacramento, CA 95812-0100

Dear Mr. Kimball:

SUBJECT: Methylmercury Objectives for Inland Surface Waters, Enclosed Bays, and Estuaries, Informational Scoping Document

In late 2005, the State of California's Delta Protection Commission (DPC) convened a collaborative of Delta stakeholders to provide input to the Central Valley Regional Water Quality Control Board (Regional Board) for consideration in the development of a TMDL for Methylmercury in the Delta. It was, and continues to be, the desire of the Delta Methylmercury TMDL Collaborative (Collaborative) to contribute to the Regional and/or State Boards' efforts to satisfy mandates imposed by the U. S. Environmental Protection Agency, while at the same time developing meaningful and realistically feasible programs to do so.

The Collaborative has spent the last year and a half working with Regional Board staff on the development of the proposed Delta Methylmercury TMDL program, and is encouraged by some of the changes that have been made to the proposed Basin Plan Amendment (BPA) as part of that process. However, one of the biggest questions Collaborative members have raised in the TMDL process – the relationship between aqueous methylmercury concentrations and concentrations in fish tissue – remains an unanswered question today.

According to a technical review of Central Valley Regional Board's June 2006 staff reports for the TMDL undertaken for the Collaborative, the relationship between aqueous methylmercury concentrations and fish tissue levels may not be the same for all regions of the Delta as the Regional Board suggested, but rather, the relationship may be linear and specific to different regions of the Delta. It has been acknowledged by Regional Board staff and other researchers that aqueous methylmercury levels vary not only between different regions of the Delta, but even within one wetland site. Given that the relationship between aqueous methylmercury concentrations and fish tissue levels varies Delta-wide, it is certainly probable that "one size does not fit all" – and this is even more true as one's perspective moves away from the Delta region to include tributaries and

other watersheds. It is therefore the Collaborative's position that: 1) water column objectives are not as useful an indicator as fish tissue objectives to address the overall goal of reducing human health and wildlife risks from mercury in fish; and 2) sound science should be employed to gather data to formulate fish tissue objectives specific to individual regions or water bodies (rather than promulgating a universal Statewide policy that does not take these regional differences into account).

Another criticism of the Delta Methylmercury TMDL staff reports issued in June 2006 that remains valid today, relates to "positive operator bias" errors. The technical review of those staff reports noted that the data Regional Board staff used for the linkage analysis (to establish the aqueous MeHg-fish tissue relationship) was not collected for this purpose, and therefore is not an accurate representation of what actually occurs in the Delta. This criticism also applies to the use of data collected as part of the 2000 SFEI study of anglers in San Francisco Bay to make generalizations about anglers in the Delta. The SFEI study included different fishing modes (i.e., boat anglers in addition to beach/bank anglers) whereas information collected in the Delta over the last couple of years includes only shore anglers. Also, the information collected on shore anglers in the Delta is based on a relatively small sample size (n=47). Rather than using the data from the SFEI studies to make generalizations about anglers in the Delta (and other inland surface waters, enclosed bays, and estuaries), it seems appropriate to conduct more surveys of both boat and shore anglers to get a more accurate description of consumption rates that are specific to the individual water bodies that would be regulated by this TMDL.

Finally, one of the peer reviewers of the June 2006 Regional Board staff reports noted that the roles of Selenium, Iron, and possibly redox are not addressed in the reports. The State Board's process should include information not only on the potential methylmercury production "hot spots", but also on areas that actually demethylate mercury, so that the roles of both sources and sinks can be analyzed, and allow for a little bit more flexibility in how this TMDL program could be implemented.

Thank you for the opportunity to comment on this scoping document. The Collaborative will continue to participate in this process as it progresses, and looks forward to working with you to develop a viable program that can maximize benefits to the Delta as well as other regions of the State.

Sincerely,

Lori Clamurro Dept. of Fish and Game, Water Branch On Behalf of the Delta Protection Commission's Delta MeHg TMDL Collaborative

Cc: Patrick Morris, Central Valley Regional Water Quality Control Board

Patrick Morris State Water Resources Control Board Central Valley Region 11020 Sun Center Drive, No. 200 Rancho Cordova, CA 95670

Dear Mr. Morris:

SUBJECT: Delta Methylmercury TMDL Revised Basin Plan Amendment Language,

and Relationship of Delta Methylmercury TMDL Program to Proposed

State Board Programs

The Delta Methylmercury TMDL Collaborative (Collaborative) is encouraged that some of its previously-stated concerns regarding the proposed Methylmercury TMDL program for the Delta are being incorporated into the revised Basin Plan Amendment language. Phased implementation of the program, including the development of a pilot Mercury Offset program, offers a more flexible program that will be easier to implement. In addition, the timeline laid out in the amended language is more realistic in terms of being able to incorporate new information on methylmercury that is being generated in ongoing studies funded by the CALFED Science and Ecosystem Restoration Programs. Finally, in accordance with a recent presentation given by Janis Cooke, Regional Board staff expects to issue a guidance document that will specify the elements that should be included in the characterization and control studies Delta landowners and managers will have to undertake. Please refer to Attachment A for feedback on the revised draft BPA language, as articulated at the meeting with Regional Board staff on February 9, 2007.

That being said, the Collaborative remains concerned that there is still no guarantee of a funding source for dealing with the control and characterization studies that regulated parties in the Delta will be required to undertake. With the passage of Proposition 84 in 2006, there is an opportunity to direct some funding for mercury studies, and other mercury monitoring and remediation activities, as contemplated in the revised Basin Plan Amendment language. However, it will require legislative and budget action to secure funding for these purposes. Assemblywoman Wolk has submitted a spot bill, AB 909, which would clarify some of the language in Proposition 84 so that funds could be made available for these purposes.

Also, the questions Collaborative members and other stakeholder groups have raised regarding the adoption of water column methylmercury objectives rather than fish tissue objectives remain unaddressed at this time. According to a technical review of the

Regional Board's June 2006 staff reports for the TMDL undertaken for the Collaborative, the relationship between aqueous methylmercury concentrations and fish tissue levels may not be the same for all regions of the Delta as Regional Board staff suggested, but rather, the relationship may be linear and specific to different regions of the Delta. It has been acknowledged by Regional Board staff and other researchers that aqueous methylmercury levels vary not only between different regions of the Delta, but even within one wetland site, yet the single relationship between water column concentrations and fish tissue concentrations was the "backbone" of the Regional Board's proposed program. Given that the relationship between aqueous methylmercury concentrations and fish tissue levels varies Delta-wide, it is certainly probable that "one size does not fit all", and therefore water column objectives are not as useful an indicator as fish tissue objectives to address the overall goal of reducing human health and wildlife risks from mercury in fish.

Another concern the Collaborative has is the relationship of the two State Board-initiated CEQA processes relating to development of a Water Quality Control, San Francisco Bay, Sacramento-San Joaquin River Delta and Tributaries Mercury Discharge Offset Policy and of Statewide Methylmercury Objectives for Inland Waters, Bays, and Estuaries. It is our understanding that whatever the State Board adopts as part of these two programs could ultimately "trump" whatever is contained within the Delta Methylmercury TMDL program documents. The Collaborative and other stakeholder groups have put a lot of time and effort into participating and submitting feedback on the Delta TMDL process, and have been encouraged by some of the changes that have been proposed since the original draft was released in June 2006. The Collaborative hopes that all this work will not be in vain, and that the Regional Board and its staff will convey all of the Collaborative's earlier feedback pertaining to the Delta TMDL so that it will be taken into account during the formulation of both of these State Board programs. Again, it is the objective of the Collaborative to help the Regional Board (and/or the State Board) adopt programs that are economically and technically feasible in the Delta, and that include sufficient funding and education to be implemented successfully over time.

The Collaborative will remain involved in the Delta TMDL process, as well as in the State Board processes. The Collaborative requests that with respect to the State Board processes, the progress that has been made with respect to addressing stakeholders' concerns in the proposed Delta-specific TMDL program, be incorporated into the State Board's programs as well.

Sincerely,

Lori Clamurro, Dept. of Fish and Game On behalf of the Delta Protection Commission's Delta MeHg TMDL Collaborative

Cc: Tom Kimball, State Water Resources Control Board Joanne Cox, State Water Resources Control Board

Attachment A: Initial Feedback on Revised Draft Basin Plan Amendment Language (Delta Methylmercury TMDL)

Wetlands and Irrigated Agriculture:

- These parties may or may not be required to implement BMP pilot projects utilizing information from ongoing studies. The language should be clarified here (i.e., are pilot projects required?)
- The operational feasibility of implementing BMPs should be considered; BMP implementation should not be at odds with the objectives of the wetland restoration project.

WWTPs:

- Would like to see an advisory panel to address prioritization of program implementation to ensure actions are tackling the greatest contributions of MeHg to the system.
- The use of water quality measures linked to fish tissue objectives signifies focus on a localized problem, and since localized impacts are not known, it is premature to make allocations at this time. Regional Board is asked to address mass allocations (grams/L) rather than concentration allocations based on unquantified localized effects. All region-wide sinks and sources should be incorporated.
- Fish tissue objectives for the Delta can't be achieved if tributaries' MeHg load reductions won't be initiated until later. There should be a contingency process addressing how the Delta TMDL program would be implemented in the absence of sufficient MeHg load reductions from tributaries.
- The proposal to enforce both load and concentration restrictions limits WWTPs' options, and since localized effects are unknown at this time, limits on concentration would not yield any useful information.

Dredging:

• "No net increase" in methylmercury is a proposed requirement of dredging operations in the Delta. It appears that with this requirement, Regional Board staff would be incorporating more stringent long-term monitoring requirements into dredging permits which currently include monitoring activities only in the short-term. This would appear to be in conflict with the objectives of the Delta Long Term Management Strategy (LTMS), which seeks to facilitate dredging projects in the Delta.

Ms Joanne Cox State Water Resources Control Board Water Quality Division 1001 I Street Sacramento, CA 95814

Dear Ms Cox:

SUBJECT: Proposed State Policy for Water Quality Control, SF Bay, Delta, and

Tributaries Mercury Discharge Offset Policy

In late 2005, the State of California's Delta Protection Commission (DPC) convened a collaborative of Delta stakeholders to provide input to the Central Valley Regional Water Quality Control Board (Regional Board) for consideration in the development of a TMDL for Methylmercury in the Delta. It was, and continues to be, the desire of the Delta Methylmercury TMDL Collaborative (Collaborative) to contribute to the Regional and/or State Boards' efforts to satisfy mandates imposed by the U. S. Environmental Protection Agency, while at the same time developing meaningful and realistically feasible programs to do so.

The Collaborative has spent the last year and a half working with Regional Board staff on the development of the proposed Delta Methylmercury TMDL program, and is encouraged by some of the changes that have been made to the proposed Basin Plan Amendment (BPA) as part of that process. One of the main interests for some Collaborative members was the inclusion of a Mercury Offset Program; the BPA language as currently proposed contains language relating to the development of a pilot Mercury Offset Program as part of the Delta TMDL process.

Comment 1: The Regional Board's draft language related to the pilot Mercury Offset Program states that the Board would consider offsets for the following sources: "mercury and gold mine sites; Cache Creek Settling Basin; instream contaminated sediments; NPDES MS4 discharges; NPDES facilities; wetlands; irrigated agriculture; flood conveyance and water management activities ..." Ideally, the State Board's proposed offset program should contain similar language specific to Delta interests and their ability to utilize offsets in the future (the State Board language as laid out in the informational scoping document [top of page 4] is much more general with respect to the types of projects that could qualify as offset projects).

Comment 2: At the February 20 scoping meeting, a few interested parties reported that Sacramento Regional County Sanitation District (SRCSD) has been implementing a pilot program which will be yielding some good information, and suggested that a work group be formed to help advise on development of an effective Mercury (and possibly Methylmercury) Offset program.

Comment 3: There were some specific comments on some of the "Principles" that should be addressed, particularly:

- General Principle #4: POTWs' ability to serve new growth (i.e., those existing facilities that are not physically "expanding"), if additional mercury discharges are only to be granted to new or expanding facilities.
- Princples Affect Implementation of Offsets #5: The reference to an exception "for offset project on public land where the public agency did not cause the mercury pollution" seems to imply that all private (non-public agency) landowners are responsible for the mercury pollution on their lands. As mercury is a legacy pollutant, there are many agricultural and wetland landowners/managers that are also not responsible for mercury present on Delta lands. It seems arbitrary to call out public agencies as the only exception to this policy.

Thank you for the opportunity to comment on this scoping document. The Collaborative will continue to participate in this process as it progresses, and looks forward to working with you to develop a viable Offset Program that can maximize benefits to those who live, work, and play in the Delta.

Sincerely,

Lori Clamurro Dept. of Fish and Game, Water Branch On Behalf of the Delta Protection Commission's Delta MeHg TMDL Collaborative